Policy Brief

Bridging Health Work Force Gaps in Amhara Region:
A Path to Equitable and Quality Health Service Provision

Executive summary

The Amhara Region of Ethiopia is grappling with a severe shortage of health workers, a crisis that is significantly hampering the performance of its health system. This chronic understaffing is not only leading to overburdened health facilities but also a decline in the quality of care, resulting in poor health outcomes for the population. The urgency to improve this situation cannot be overstated.

Despite initiatives like the Health Extension Program (HEP) and investments in medical education that have increased the number of health workers, disparities persist, particularly between urban and rural areas. The Amhara region, Ethiopia's second most populous region, mirrors these national challenges. The health workforce density in Amhara needs to improve, especially in rural areas, leading to gaps in the provision of essential health services. A high burden of infectious diseases, maternal and child health issues, and emerging non-communicable diseases further strains the region's health sector.

Evidence shows that, in 2022/23, Ethiopia's density of physicians, health officers, nurses, and midwives' density per 10,000 population was 1.7, 3.3, 10.2, and 2.3, respectively, while in the Amhara region, the densities were 1.1, 1.5, 6.3, and 2.3 per 10,000 population, respectively. Most town health offices (THOs) in the area have higher densities across different professions than zone health departments (ZHDs), where the population is predominantly rural. For instance, in 2022 /2023, Debra Birhan and Bahir Dar THOs had the highest overall health workforce density of 60.9. In contrast, West Gojjam, North Shewa, and South Wollo ZHDs had an overall health workforce density of 8.9, 10.1, and 10.5 per 10,000 population, respectively.

The region's health workforce density falls far below national and global targets, which poses a severe challenge to achieving equitable health and providing quality service. This shortfall is further exacerbated by the uneven distribution of health workers, with a disproportionate concentration in urban areas, leaving rural communities underserved. The imbalance in workforce allocation leads to gaps in essential health services, especially in remote and marginalized areas, where the need is often greatest. To ensure that all residents of the Amhara region have access to quality health services, it is imperative to address this disparity and ensure the equitable distribution of health workers. Strengthening the health workforce density, particularly in rural settings, is crucial for improving health services' overall effectiveness and reach to all. This will not only help achieve equity in health service delivery but also enhance the quality of care, ultimately leading to better health outcomes for the entire region's population.

Background

The health workforce is the backbone of any effective healthcare system. In the Amhara Region, persistent shortages of health workers have created significant barriers to delivering quality health services. These shortages affect various healthcare system levels, from primary care to specialized services, exacerbating existing health challenges and undermining efforts to improve health outcomes.

The health workforce density, representing the number of healthcare professionals per population unit, is a vital indicator of a country's capacity to provide essential health services. The World Health Organization (WHO) recommends a minimum of 4.5 skilled health professionals per 1,000 people to achieve Universal Health Coverage (UHC).

Ethiopia, a low-income country, faces significant challenges in achieving adequate health workforce density (1.2 per 1,000 population), as reported in 2022. Despite efforts by the government and international partners, the Amhara region's health worker density, like that of Ethiopia's health worker density, remains below the WHO's recommended level.

The Amhara region, Ethiopia's second most populous region, reflects these national challenges. Despite improvements, the health workforce in Amhara needs to be increased, especially in rural areas, leading to gaps in essential health services. A high burden of infectious diseases, maternal and child health issues, and emerging non-communicable diseases further strains the region's health sector. The Amhara Region suffers from a chronic shortage of health workers, including doctors, nurses, midwives, and other essential health professionals. This shortage results in overburdened healthcare providers, long patient waiting times, and compromised quality of care.

Approaches

The evidence presented in this policy brief emanates from the in-depth analysis of the DHIS2 data and review of the mid-term evaluation of the Health Sector Transformation Plan (II). Regional program managers, policymakers, and experts in the areas were consulted throughout the process, from conception to analysis and development of this policy brief, to determine and contextualize priority issues and interpret findings. These experts in the region reviewed, validated and approved the final version.

Key findings

Health workforce density at regional level

Low health worker density and inequitable distribution of health workers are also critical areas observed. The national health worker density varies significantly from region to region and rural to urban areas. The COVID-19 and the conflicts negatively affected human resource development and management. COVID-19 affected the availability and distribution of HRH, with health workers dying, leaving the sector, and being pulled away from their regular stations to staff COVID-19 units; in addition, the conflict in the region resulted in death, disability, looting, rape, psychological trauma, displacement, and overburden on human resources for health.

The line graph depicts the physician density per 10,000 population in Ethiopia and the Amhara region from 2018/19 to 2022/23. Over this period, Ethiopia's physician density increases steadily from about 0.93 to 1.74, showing significant improvement. In contrast, the Amhara region starts at a lower density of 0.63 and rises more gradually to about 1.1 by 2022/23. Notably, both had similar densities around 2019/20, but Ethiopia's density continues to grow faster, creating a widening gap between the two by the end of the observed period (Figure 1).

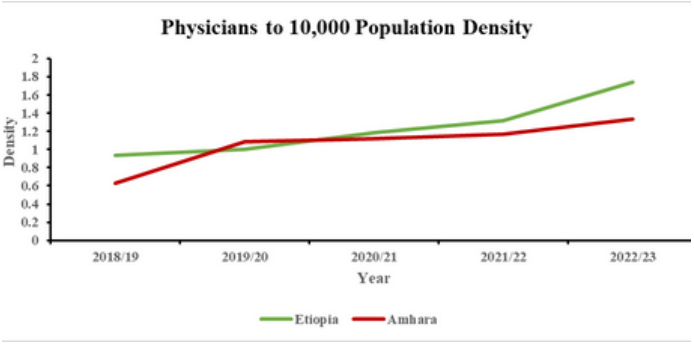

Figure 1. Physicians to Population Ratio in Amhara region and Ethiopia

The line graph shows Ethiopia's health officer density per 10,000 population and the Amhara region from 2018/19 to 2022/23. Initially, both areas had a similar density of about 1.1 in 2018/19. Over the next three years, both experience a slight increase, with densities converging around 1.5 in 2019/20 and staying relatively steady through 2020/21 and 2021/22. However, in 2022/23, a significant divergence occurs: Ethiopia's health officer density rises sharply to about 3.3, while the Amhara region's density remains stable at approximately 1.5. This results in a notable disparity between the two by the end of the period (Figure 2).

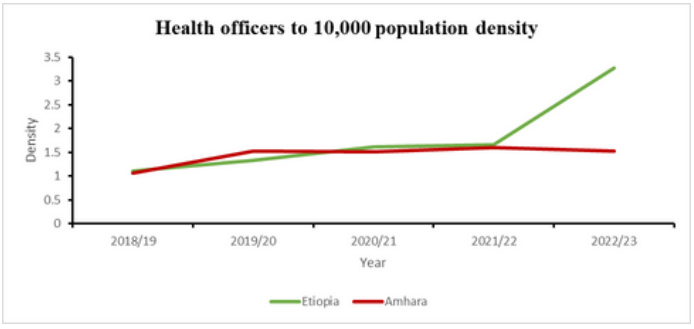

Figure 2. Health Officers to Population Ratio in Amhara region and Ethiopia

The line graph illustrates the nurse density per 10,000 population in Ethiopia and the Amhara region from 2018/19 to 2022/23. Initially, both had a closer nurse density in 2018/19. Over the next three years, both show a gradual increase, with Ethiopia's density reaching about 6.79 and Amhara's about 5.45 by 2020/21. In 2021/22, the growth continues steadily, with Ethiopia's density rising to around 7.1 and Amhara's to approximately 6.0. By 2022/23, Ethiopia will experience a significant increase in nurse density by nearly 10.17, while the Amhara region's density continues to increase slowly, reaching around 6.3. This results in a widening gap between the two over the five years (Figure 3).

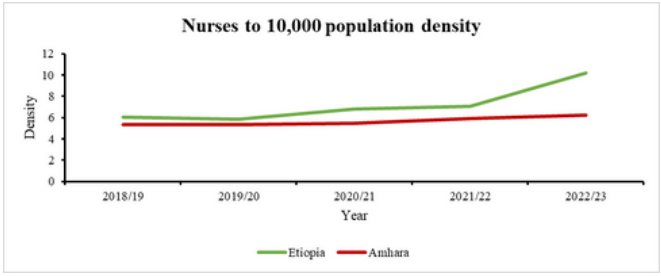

Figure 3. Nurses to Population Ratio in Amhara regionand Ethiopia

The graph illustrates the midwife to 10,000 population density in Ethiopia and the Amhara region over five years, from 2018/19 to 2022/23. Initially, the midwife density in Amhara is higher than in Ethiopia, starting at around 1.8 compared to Ethiopia's 1.6 in 2018/19. Both show an increase in midwife density, peaking in 2020/21, with Amhara reaching approximately 2.5 and Ethiopia around 2.2. Post-2020/21, Amhara's density experiences a slight decline, while Ethiopia's continues to rise modestly, eventually converging at roughly 2.3 in 2022/23. This convergence suggests a significant improvement in midwife distribution in Ethiopia, narrowing the gap with Amhara over the period .

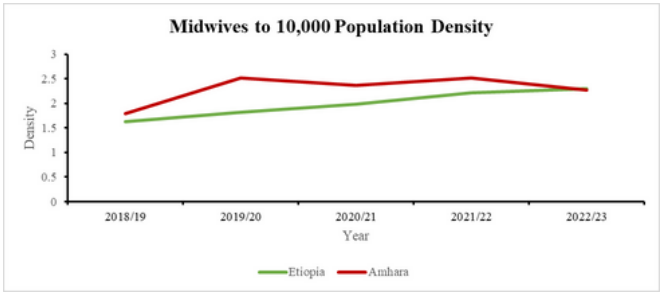

Figure 4. Midwives to Population Ratio in Amhara Region and Ethiopia

Health workforce density by Zone

This graph illustrates the density of the core health workforce (physicians, health officers, nurses, and midwives) across various zone levels, measured by the number of health workers per zone. The graph shows an apparent disparity in the distribution of core health workforce densities across different zones. Debere Birhan, Bahir Dar, and Debre Tabor Town Health Offices have workforce densities well above the regional target of 20, with Debere Birhan Town Health Office reaching the highest density at 60.9. In contrast, many zones, such as West Gojjam, North Shewa, and South Wollo Zonal Health Departments, had significantly lower densities of 8.9, 10.1, and 10.5, respectively, falling below the regional average of 13.7 (Figure 5).

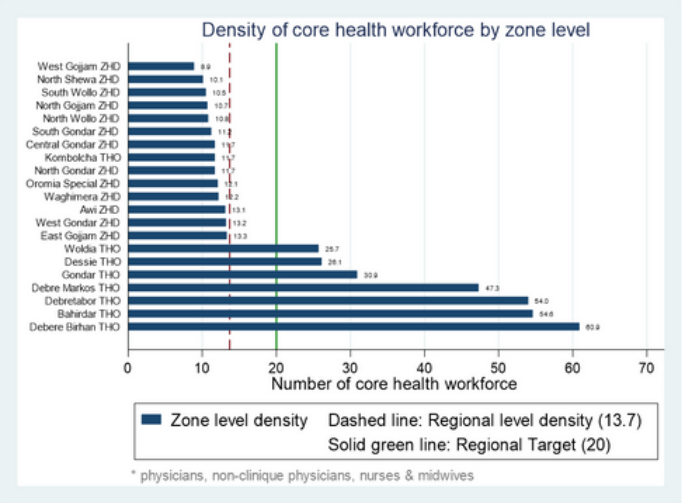

Figure 5. Health workforce distribution among zonal health departments and town health offices in the Amhara region

Implications

A low workforce in the Amara region can significantly impact health access and quality. Residents may face long waits and travel distances for critical health services, leading to delayed diagnoses and treatments. With fewer staff to share the workload, existing health workers, overwhelmed by heavy workloads, may experience burnout and reduced job satisfaction, potentially leading to high stress and reduced quality of care. This situation exacerbates health inequities, particularly for vulnerable populations. The inability to effectively recruit, retain, and equitably distribute health workers leads to inefficiencies in health service delivery, affecting the overall performance of the health system. As a result, the region could face higher morbidity and mortality rates, poorer health outcomes, and economic setbacks due to decreased productivity and increased healthcare costs. Addressing these challenges requires strategic investments in health infrastructure and workforce retention.

Conclusion

Our in-depth analysis uncovered a critical shortfall in the Amhara region's health workforce density, significantly lower than national benchmarks and global standards. This deficiency in the number of health professionals is a crucial factor undermining the region's ability to provide essential health services, especially compared to the other areas within Ethiopia and internationally targets.

Moreover, the study highlights a pronounced inequality in the distribution of health workers across different regional zones. While urban areas, such as the region's and zone capitals and large towns, are likely to have a relatively higher concentration of health professionals, rural settings are severely underserved. This imbalance creates substantial disparities in healthcare access and quality, with rural populations facing significant challenges in receiving timely and adequate medical care. The impact of ongoing conflicts in the region further exacerbates the situation. The conflict has disrupted the distribution of health workers, with many being displaced, reallocated to emergency services, or even leaving the profession due to insecurity and trauma. The uneven distribution, exacerbated by conflict, has led to critical shortages in some of the most vulnerable and high-need areas. This has further widened the gap between urban and rural healthcare provision and deepened the challenges of maintaining an effective health system in the region.

Addressing these disparities in workforce distribution, particularly in conflict-affected areas, is essential for improving regional health outcomes. Ensuring a more equitable allocation of health professionals, with particular attention to the needs of underserved rural and conflict-impacted settings, is critical for closing the gap between urban and rural health service provision. This will be crucial in achieving a more balanced and resilient health system that provides quality care to all regional residents.

Policy Recommendations

Improving the distribution of health workers by developing policies to ensure equitable distribution across urban and rural areas and in conflict areas and using data-driven approaches and performance-based adjustments to allocate health workers based on population needs and service demand. Link the distribution of health workers to performance metrics that reflect the health outcomes and needs of the communities they serve, ensuring that resource allocation is aligned with health system priorities.

Strengthening Health Workforce Data Systems by implementing robust health workforce information systems to monitor and manage workforce data. This involves developing and enforcing standardized data collection tools and protocols across all health system levels and routinely analyzing data on health worker distribution, performance and needs to inform policy decisions.

Expanding training capacity by increasing the capacity of existing medical, nursing, and midwifery schools, as well as investing in infrastructure upgrades, faculty development, and educational resources to accommodate more health professionals and provide higher quality education.

Source of funding

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References

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2. Ethiopian Health Sector Transformation Plan II Mid-Term Review Report, 2023
3. Amhara National Regional State Health Bureau Annual Performance Report of 2022/2023
4. Amhara National Regional State Health Bureau HMIS Data, 2023

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Elevating Health for All!